

## A Portable Device Having Biometrics-Based Authentication Capabilities

### **ABSTRACT**

Apparatus and method for implementing biometrics-based authentication. In a preferred embodiment, the present invention is embodied in a portable device. Specifically, in one embodiment, the portable device includes a microprocessor, a non-volatile memory coupled thereto, and a biometrics-based authentication module controlled by the microprocessor. Preferably, the biometrics technology used is fingerprint authentication technology. The authentication module is capable of registering a fingerprint upon first use of the portable device, storing an encoded version of the fingerprint in the non-volatile memory. Subsequently, the authentication module can read a person's fingerprint and reliably determine whether the fingerprint matches the registered fingerprint stored in the non-volatile memory. If a match is found, access to information in the non-volatile memory is granted to that person; otherwise, access is denied. Embodiments of the present invention thus provide a highly convenient, secured and reliable method and system for user authentication and access control which was not achievable in prior art password-based authentication approaches.